81. (New) The method of claim 14, wherein the animal is a human.

82. (New) The liposome of claim 1, wherein Z^1 is OH or a conversion-inhibiting group selected from the group consisting of $-X^1$, $-OX^1$, $-X^2X^3$ and $-OX^2X^3$.

83. (New) The liposome of claim 1, wherein R^2 is an alkyl chain.

84. (New) The liposome of claim 1, wherein R^1 is $CH_3(CH_2)_{12}-$.

85. (New) The liposome of claim 1, wherein Y^1 is $-CH=CH-$.

86. (New) The liposome of claim 1, wherein Y^2 is H.

87. (New) The liposome of claim 1, wherein Y^3 is $-C(O)R^2$.

88. (New) The liposome of claim 1, wherein Z^1 is OH.

89. (New) The liposome of claim 88, wherein Z^2 is a group having the formula $-X^2X^3$ or $-O-X^2X^3$.

90. (New) The liposome of claim 89, wherein Z^2 is $-OC(O)CH_3$, $-OC(O)CH_2CH_2CH_3$, $-OC(O)CH(CH_3)CH_3$ or $-OSi(CH_3)_2C(CH_3)_3$.

91. (New) The liposome of claim 90, wherein Z^2 is -OSi$(CH_3)_2$C$(CH_3)_3$.

92. (New) The liposome of claim 88, wherein Z^2 is a group having the formula -X^1 or -OX^1.

93. (New) The liposome of claim 1, wherein Z^1 is -X^1, -OX^1, -X^2X^3 and -OX^2X^3.

94. (New) The liposome of claim 93, wherein Z^1 is -OC(O)CH_3, -OC(O)$CH_2CH_2CH_3$, -OC(O)CH$(CH_3)CH_3$ or -OSi$(CH_3)_2$C$(CH_3)_3$.

95. (New) The liposome of claim 1, wherein the compound having the formula R^1-Y^1-CHZ^1-CH(NY^2Y^3)-CH_2-Z^2 is CH_3-$(CH_2)_{12}$-CH=CH-CH_2Z^1-CH(NHY^3)-CH_2Z^2.

96. (New) The liposome of claim 95, wherein Z^1 is OH and Y^3 is a group having the formula -C(O)R^2.

97. (New) The liposome of claim 96, wherein Y^3 is -C(O)$(CH_2)_4CH_3$.

98. (New) The liposome of claim 87, wherein Z^2 is -OSi$(CH_3)_2$C$(CH_3)_3$, -OSi$(PO_4)_2$C$(CH_3)_3$, -C(O)CH_3 or -OC(O)$CH_2CH_2CH_3$.

99. (New) The liposome of claim 1, wherein the bilayer comprises at least about 10 mole percent of the compound having the formula R^1-Y^1-CHZ^1-CH(NY^2Y^3)-CH_2-Z^2. - -